

Work Order ID 68575

Monday, April 18, 2011 11:33:59 AM

Page 1

Item ID: D4151-041

Accept

Setup Start

Revision ID:

Stop

Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 4/18/2011 Start Qty: 4.00

Cust Item ID:

Required Date: 4/21/2011 Req'd Qty: 4.00

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D4151 | C |

100

0.00



Small Fab

Memo

0.00

Small Fab

1- Assemble as per dwg

SO 11/04/27

①

110

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

SO 11/04/27

②

120

Identify as per dwg & Stock Location:

0.00



Packaging

Memo

0.00

Packaging

Call 4/27 (6)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____








| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |


NOTE: Date & initial all entries

Work Order ID 68575

Monday, April 18, 2011 11:33:59 AM

Page 2

| | | | | | |
|--|----------------------------|---|-------------------------|--------------------|---|
| Item ID: D4151-041 | Accept |  | Setup | Start |  |
| Revision ID: | | | | Stop |  |
| Item Name: Basket Fwd Hardpoint Assembly, Lower | | | | | |
| Start Date: 4/18/2011 | Start Qty: 4.00 |  | Cust Item ID: | | |
| Required Date: 4/21/2011 | Req'd Qty: 4.00 |  | Customer: | | |
| Reference: | | | | | |
| Approvals: | Process Plan: _____ | Date: _____ | Tooling: _____ | Date: _____ | Run Start  |
| | QC: _____ | Date: _____ | SPC (Y/N): _____ | Date: _____ | Stop  |

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
|  | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

MF
11-04-27

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Monday, April 18, 2011 11:34:06 AM

Page 1

Work Order ID: 68575

Parent Item: D4151-041

Parent Item Name: Basket Fwd Hardpoint Assembly, Lower




Start Date: 4/18/2011

Required Date: 4/21/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC
IPP Rev:B 10.07.22 as per revB DD verf:JLM
11.01.21 as per dwg revC DD verf:JLM
IPP Rev:C

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| D4151-1  Lower Hardpoint Plate | | Manufactured | No | | | 100 | Each | 7.0000 | 2 | 8 | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | <u>Loc Code</u> | | | | | | |
| | | | | ST134 | | 7 | B 68577 | | | 5 | | | |
| | | | | 68271 | | 7 | | | | 7 | | | |
| D4151-5  Fwd Basket Instl Stud | | Manufactured | No | | | 100 | Each | 0.0000 | 1 | 4 | | | |
| AN4C13A  BOLT | | Purchased | No | | | 100 | Each | 44.0000 | 2 | 8 | | | |
| | | | | <u>Location</u> | | <u>Loc Qty</u> | <u>Loc Code</u> | | | | | | |
| | | | | ST353 | | 44 | | | | | | | |
| | | | | 117366 | | 44 | | | | 12 | | | |

SO 11/04/27

5

7

4

6 SA 11/04/27

SA 11/04/27

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

Monday, April 18, 2011 11:34:06 AM

Page 2

Work Order ID: 68575



Parent Item: D4151-041



Parent Item Name: Basket Fwd Hardpoint Assembly, Lower

Start Date: 4/18/2011

Required Date: 4/21/2011

Start Qty: 4.00

Required Qty: 4.00

MS21043-4 Purchased No

100 Each

1,180.000 2 8



SA 11/04/27

Nut

Location

Loc Qty

Loc Code

| | | |
|--------|-----|--|
| FG | 40 | |
| 104603 | 40 | |
| ST300 | 600 | |
| 117423 | 600 | |
| ST301 | 540 | |
| 114523 | 3 | |
| 116188 | 237 | |
| 116549 | 300 | |

12

NAS1149C0432R Purchased No

100 Each

6,512.000 4 16



SA 11/04/27

Washer

Location

Loc Qty

Loc Code

| | | |
|--------|------|--|
| ST297 | 6512 | |
| 116900 | 1512 | |
| 117291 | 5000 | |

27

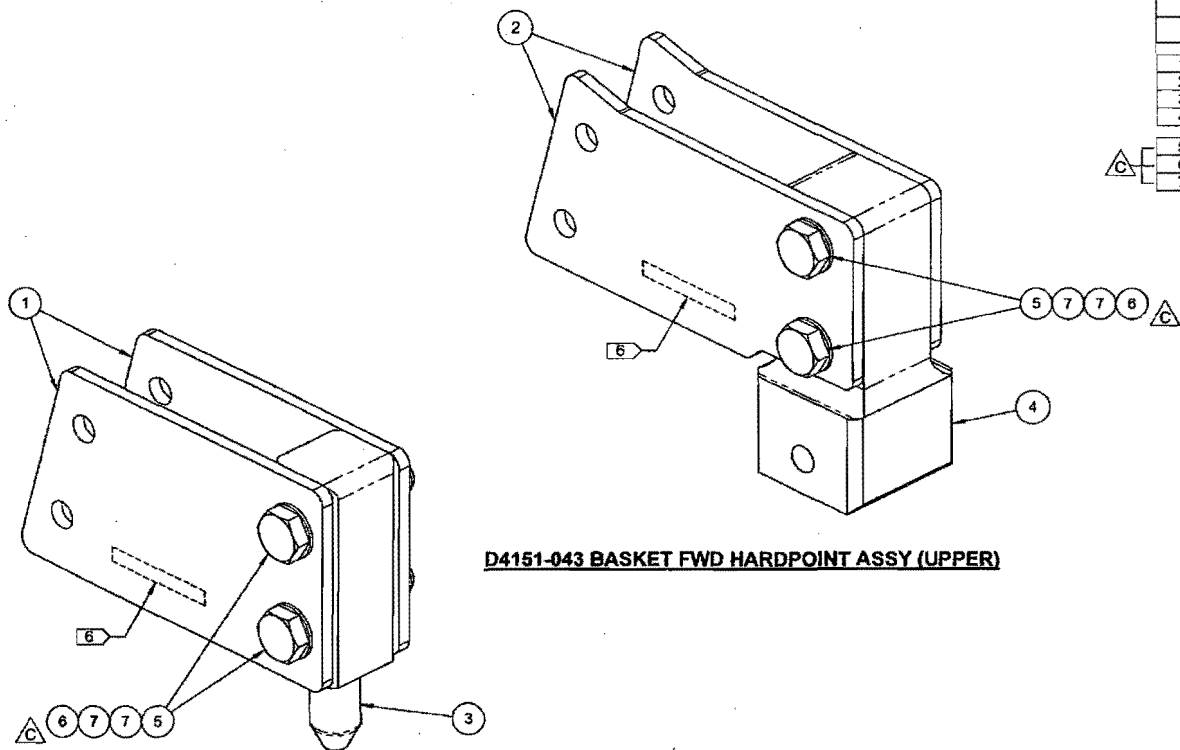
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



D4151-043 BASKET FWD HARDPOINT ASSY (UPPER)

D4151-041 BASKET FWD HARDPOINT ASSY (LOWER)

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4151-04X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT:
 - D4151-041 = 0.88 lbs
 - D4151-043 = 1.17 lbs

| ITEM | QTY -041 | QTY -043 | P/N | DESCRIPTION |
|------|-------------|-------------|---------------|-----------------------------------|
| | X | | D4151-041 | BASKET FWD HARDPOINT ASSY (LOWER) |
| | | X | D4151-043 | BASKET FWD HARDPOINT ASSY (UPPER) |
| 1 | 2 | | D4151-1 | LOWER HARDPOINT PLATE |
| 2 | | 2 | D4151-3 | UPPER HARDPOINT PLATE |
| 3 | 1 | | D4151-5 | FWD BASKET INSTL STUD (LOWER) |
| 4 | | 1 | D4151-7 | FWD EYEBOLT RECEIVER (UPPER) |
| 5 | 2 | 2 | AN4C13A | BOLT |
| 6 | 2 | 2 | MS21043-4 | NUT |
| 7 | 4 | 4 | NAS1149C0432R | WASHER |

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 68525
11-04-15

RELEASED
2011-01-28
JMP

| | | | |
|------------|---|----|----------|
| C | AM4 HARDWARE WAS AN3 (B6-1, C3-1 & D3-1); Ø0.252 WAS Ø0.191 (C5-2, D1-2); TIGHTENED TOL ON 1.000 DIM (C5-2, D1-2, C7-3, C3-3); Ø0.250 WAS Ø0.191 (C6-3, B4-3); 1.63 WAS 1.75 (C1-2), 2.84 WAS 2.78 (B3-3) AND 1.88 WAS 1.80 (C1-3) TO PRESERVE 1 SED. REASON: SEE D407-787 DESIGN JOURNAL. | MB | 10.12.14 |
| B | ADDED D4151-5/-7 (SHT 3); D4151-5 WAS D3911-1 (ZN B6-1 & D3-1); D4151-7 WAS D3911-3 (ZN C4-1 & D3-1) ITEMS #5, 6 & 7 REPLACE MS20915-4M20 (ZN C3-1, D3-1 & B3-1); Ø0.191 2 PL REPLACES Ø0.129 3 PL (ZN C5-2); Ø0.191 2 PL REPLACES Ø0.129 4 PL (ZN D1-2). REASON: SEE TR-D390-607-2 REV. B. | MB | 10.07.05 |
| A | NEW ISSUE | MB | 10.06.22 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | | | |
| DRAWN | | | |
| CHECKED | SC | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 10.12.14 | | |

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4151** REV. C
SHEET 1 OF 3
TITLE **BASKET FWD HARDPOINT** SCALE NTS

COPYRIGHT © 2010 BY DART AEROSPACE LTD
THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD AND IS SUPPLIED ON THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR DISCLOSED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

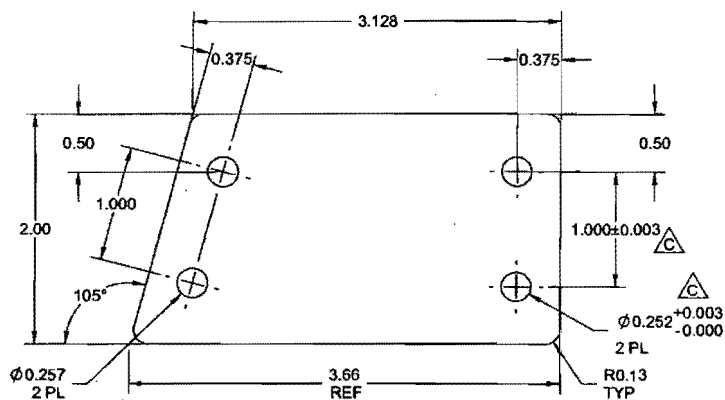
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

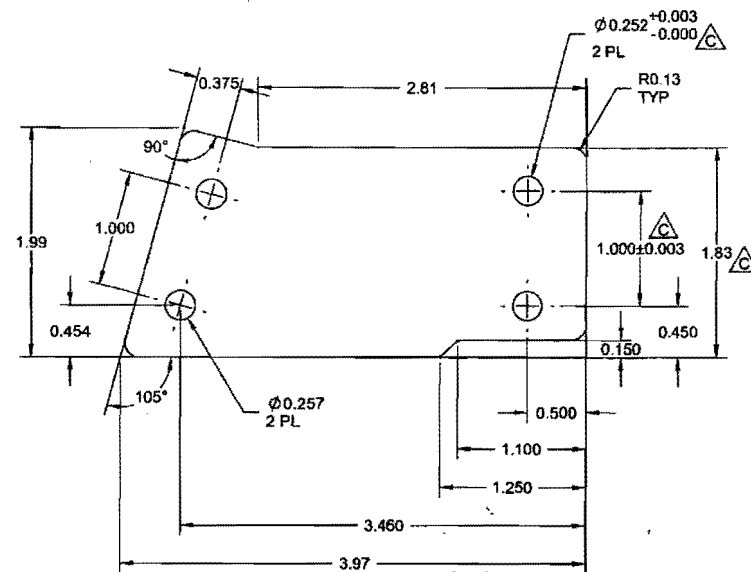
| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



0.125
REF

D4151-1 LOWER HARDPOINT PLATE



0.125
REF

D4151-3 UPPER HARDPOINT PLATE

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL SHEET ANNEALED 2B, 0.125 THK
PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240
REF. DART SPEC. M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
- 7) WEIGHT:
 - D4151-1 = 0.24 lbs
 - D4151-3 = 0.23 lbs

| | | | |
|---|----------|--|--------------|
| DESIGN | | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | | | |
| CHECKED | | | |
| MFG. APPR. | | | |
| APPROVED | | | |
| DE APPR. | | | |
| DATE | 10.12.14 | DRAWING NO. D4151 | REV. C |
| | | TITLE | SHEET 2 OF 3 |
| | | BASKET FWD HARDPOINT | SCALE NTS |
| COPYRIGHT © 2010 BY DART AEROSPACE LTD | | | |
| THIS DOCUMENT IS UNCLASSIFIED AND IS RELEASED ON THE BASIS OF A DETERMINATION THAT IT IS NOT TO BE RELEASED FOR ANY PURPOSE OR COPIED OR REPRODUCED IN ANY FORM OR BY ANY MEANS WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | | | |

RELEASED
2011-01-18

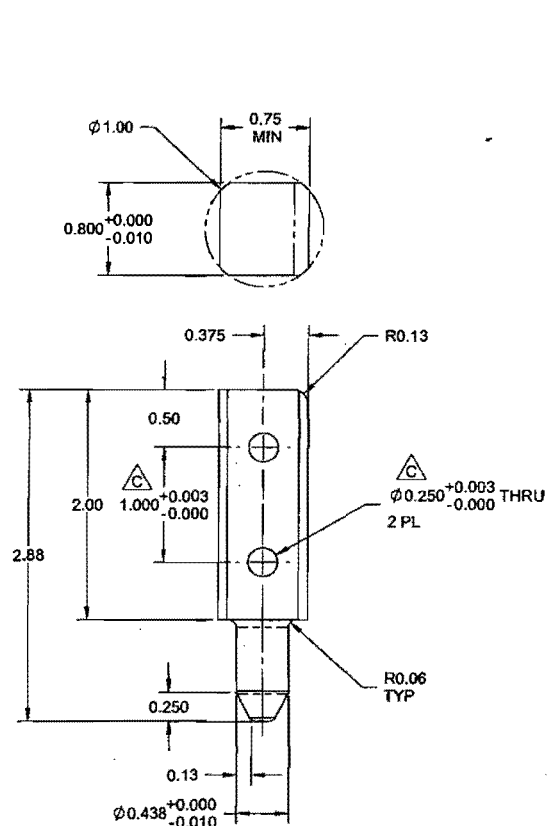
| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

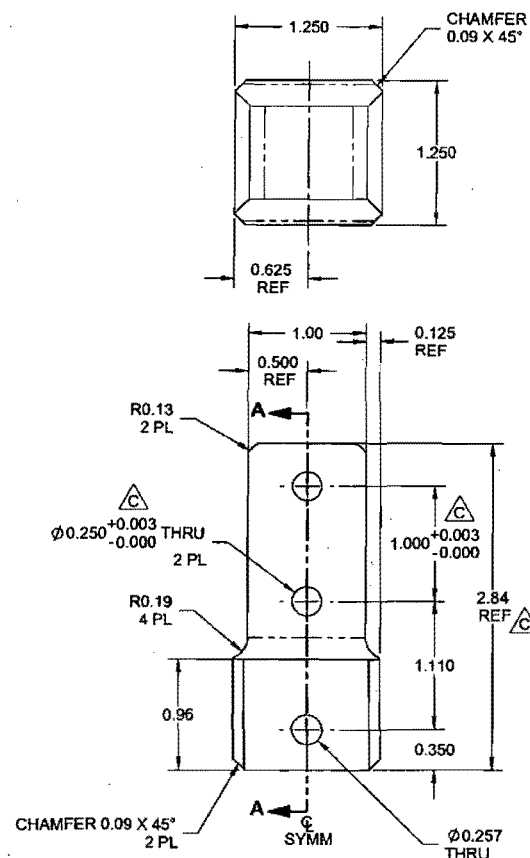
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

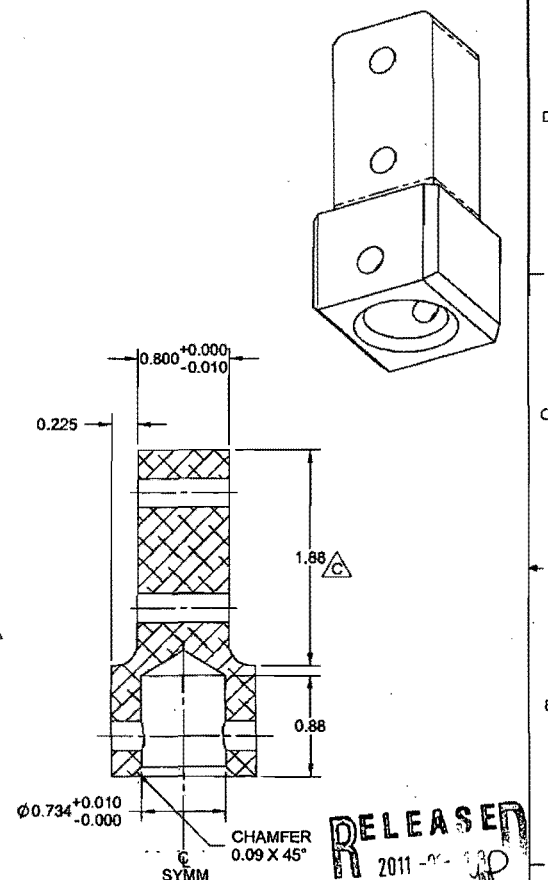
NOTE: Date & initial all entries



D4151-5 FWD BASKET INSTL STUD (LOWER)



D4151-7 FWD EYEBOLT RECEIVER (UPPER)



SECTION A-A

- NOTES:**
- 1) MATERIAL -5: 303/304/316 STAINLESS STEEL ROUND BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303R OR M304R
-7: 303/304/316 STAINLESS STEEL BAR, PER ASTM A276 OR ASTM A582 PER DART SPEC M303B OR M304B
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY AT ASSEMBLY
 - 7) WEIGHT -5: 0.36 lbs
-7: 0.70 lbs

| | | | |
|------------|----------|---|--------------|
| DESIGN | | DART AEROSPACE LTD | |
| DRAWN | | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED | | DRAWING NO. D4151 | REV. C |
| MFG. APPR. | | TITLE | SHEET 3 OF 3 |
| APPROVED | | BASKET FWD HARDPOINT | SCALE |
| DE APPR. | | | NTS |
| DATE | 10.12.14 | COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE TO THE PUBLIC WITHOUT LIMITATION NOT TO BE USED FOR ANY PURPOSE OR FOR ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. | |

w/o 68575

RELEASED
2011-01-03
RELEASED

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries